

### Listing of Claims

37. (Previously Presented) A computer-implemented method for diagnosing a problem in a product using a Bayesian super model data structure which stores a predetermined set of problems, predetermined criteria for identifying problems in the set, and sub model data structures including actions for addressing the problems in the set, the method comprising:

receiving user input including criteria for identifying the problem;

comparing the received criteria with the predetermined criteria for identifying problems in the set of the super model data structure;

responsive to a match in criteria within an acceptable margin, selecting the problem from the set associated with the matched criteria;

selecting a sub model data structure storing actions for addressing the selected problem based upon the following predetermined criteria stored in the super model: a probability of the execution of one or more actions stored in the sub model solving the selected problem and a cost of the execution of the one or more actions; and

executing one or more actions stored in the sub model.

38. (Previously Presented) The method of claim 37 wherein selecting a sub model data structure storing actions for addressing the selected problem is based further upon a predetermined measure of belief value in the sub model to address the selected problem, the measure of belief value being stored in the super model data structure.

39. (Previously Presented) The method of claim 37 wherein the product is a computer printing system.

40. (Previously Presented) A system for diagnosing a problem in a product comprising:  
a memory for storing a Bayesian super model data structure including a predetermined set of problems, predetermined criteria for identifying problems in the set, and sub model data structures including actions for addressing the problems in the set;

a user input device for receiving user input including criteria for identifying the problem; and

a diagnostic system communicatively coupled to the user input device and having access to the memory storing the super model data structure for comparing the received criteria with the predetermined criteria for identifying problems in the set of the super model data structure, and responsive to a match in criteria within an acceptable margin, selecting the problem from the set associated with the matched criteria, and selecting a sub model data structure storing actions for addressing the selected problem.

41. (Previously Presented) The system of claim 40 wherein the diagnostic system selects the sub model data structure storing actions based upon the following predetermined criteria stored in the super model: a probability of the execution of one or more actions stored in the sub model solving the selected problem and a cost of the execution of the one or more actions; and executes one or more actions stored in the selected sub model.

42. (Previously Presented) The system of claim 41 wherein selecting a sub model data structure storing actions for addressing the selected problem is based further upon a predetermined measure of belief value in the sub model to address the selected problem, the measure of belief value being stored in the super model data structure in the memory.

43. (Previously Presented) The system of claim 40 wherein the product is a computer printing system.

### COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

These comments are responsive to the Statement of Reasons for Allowance accompanying the Notice of Allowance with a mailing date of March 21, 2005 and having a due date of June 21, 2005.

In his paragraph 3, the Examiner stated that the closest prior art Mokhlesi US 6,345,001 B1 failed to teach or suggest:

selecting a sub model data structure storing actions for addressing the selected problem based upon the following predetermined criteria stored in the super model: a probability of the execution of one or more actions stored in the sub model solving the selected problem and a cost of the execution of the one or more actions; and

executing one or more actions stored in the sub model.

Applicant clarifies that these elements as recited above only appear in independent claim 37. Applicant does agree that the cited prior art does not teach these elements, and moreover, the cited prior art also fails to teach or suggest at least the following element recited in independent claim 40

a memory for storing the Bayesian super model data structure including a predetermined set of problems, predetermined criteria for identifying problems in the set, and sub model data structures including actions for addressing the problems in the set.

The Mokhlesi patent references Bayes Theorem for the first time in its Appendix section beginning at Col. 13, line 38 which develops formulas for accurately representing that a compressed count R for the number of erase/reprogramming cycles can represent within acceptable accuracy the actual number A of erase/reprogramming cycles for a block of memory. A Bayesian super model data structure is not taught or suggested and much less is there any teaching or suggestion of sub model data structures including actions for addressing the problems in the set.

#### Conclusion

Applicants respectfully submit these Comments on the Statement of Reasons for Allowance.

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Respectfully Submitted on Behalf of Applicants  
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